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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,543

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Loren Lantz

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54964

7590

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EXAMINER

TOWA, RENE T

ART UNIT

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3736

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,543	<b>Applicant(s)</b> LANTZ ET AL.	
	<b>Examiner</b> RENE TOWA	<b>Art Unit</b> 3736	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 February 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. The Office action is responsive to an amendment filed February 21, 2008. Claims 1-12 are pending. Claim 1 has been amended. No new claim has been added. Claims 13-20 are cancelled.

#### *Claim Objections*

2. Claims 1-12 are objected to because of the following informalities:

In regards to claim 1, at lines 9-10, the limitations "eject finger" should apparently read --finger-- as per line 5.

In regards to claim 10, at line 1, the limitations "A probe cover as recited in claim 1" should apparently read --A tympanic thermometer-- as per claim 1.

Appropriate correction is required.

#### *Claim Rejections - 35 USC § 103*

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. **Claims 1 & 4-12** are rejected under 35 U.S.C. 103(a) as obvious over Yamaka (US 6,367,973) in view of Canfield et al. (US 6,186,959) further in view of Makita et al. (US 5,340,215).

In regards to **claim 1**, Yamaka disclose(s) a tympanic thermometer 1 comprising:  
a heat sensing probe 6 defining a longitudinal axis and an outer surface  
extending from a distal end of the tympanic thermometer 1;

an ejection apparatus 7 including a button 81 and a finger 70 extending from the distal end of the tympanic thermometer 1 and the finger 70 being configured for movement along the outer surface of the probe 6 toward a distal end of the probe 6; and

a probe cover 10 being mountable to the distal end of the tympanic thermometer 1, the mounted probe cover 10 defining an inner surface configured to engage the outer surface of the probe 6, and the mounted cover 10 conceals the finger 70 and the outer surface of the probe tip, the probe cover 10 including at least one proximal face projecting at the inner surface of the probe cover 10,

wherein the finger 70 is movable, to eject the probe cover 10, toward the distal end of the probe 6, the finger 70 moving along the outer surface of the probe 6 and along the inner surface of the probe cover 10, and further the probe cover is in contact with the proximal face at the inner surface of the probe cover 10 until the probe cover 10 is released from the probe 6 (see abstract; see figs. 1-3 & 5; col. 4, lines 36-47; col. 10, lines 41-60).

In regards to **claim 5**, Yamaka disclose(s) a tympanic thermometer 1 wherein the finger 70 includes a tapered finger tip defining a distal strike face 73 (see fig. 3).

In regards to **claim 6**, Yamaka disclose(s) a tympanic thermometer 1 wherein the finger 70 is movable between a retracted position and an extended position (see figs. 2 & 5).

In regards to **claim 8**, Yamaka disclose(s) a tympanic thermometer 1 whereby the finger 70 is releasably fixable in a retracted position (see figs. 3 & 5).

In regards to **claims 10-11**, Yamaka disclose(s) a tympanic thermometer 1 includes a plurality of longitudinal ribs 18, each rib 18 having a transverse face having a substantially parallel orientation relative to the axis of the probe (see fig. 2; col. 6, lines 37-40).

*Yamaka discloses a tympanic thermometer 1, as disclosed above, that fails to explicitly teach a plurality of fingers, a longitudinal rib, protuberances or fingers for ejecting the probe cover.*

However, **Canfield et al.** teach that it is known to provide a thermometer with an ejection mechanism having a button and a spring; wherein the mechanism is biased to the extended position; wherein the mechanism is releasably fixable via a latch, whereby the latch includes a release button 15 that is engageable to release the at least one finger 13c from the retracted position (see figs. 23 & 23A-B; col. 34, lines 1-13, 18-26 & 35-46).

Applying the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) and are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

In regards to **claims 1, 7 & 9**, both Yamaka and Canfield et al. teach tympanic thermometers with ejection mechanisms that include a button that is orthogonal to the probe tip; since Yamaka teaches an ejection mechanism that moves a pushing member

Art Unit: 3735

70 perpendicularly from the ejection button 81 (see col. 7, lines 16-26) using a cam mechanism (see figs. 3 & 5; col. 9, lines 11-22) in order to mount the measuring switch 4 on the upper portion the back of the thermometer body as to concentrate the plurality of functional members in a small area thereby achieving a good operability of the thermometer (see col. 9, lines 22-35) and Canfield et al. teach that it is known to move a pushing member perpendicularly from an ejecting button 552 using a spring 562 (see figs. 23 & 23A-B; col. 34, lines 1-13, 18-26 & 35-46), it would have been obvious to one of ordinary skill in the art at the art at the time Applicant's invention was made to modify the thermometer of Yamaka to include a spring as taught by Canfield et al. in order to mount the measuring switch 4 on the upper portion the back of the thermometer body as to concentrate the plurality of functional members in a small area thereby achieving a good operability of the thermometer.

In regards to **claim 4**, since Yamaka teaches a conical pushing member 70 that applies a pushing force circumferentially against the inner surface of probe cover, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to modify the thermometer of Yamaka as modified by Canfield et al. above with a plurality of circumferentially- arranged, tapered fingers, as claimed, in order to apply a conical pushing force circumferentially against the inner surface of probe cover.

Similarly, in regards to **claim 12**, since Yamaka teaches a circumferential distal strike face on the probe cover so as to apply a circumferential pushing force on the distal strike face to eject the probe cover, it would have been obvious to one of ordinary

skill in the art at the time Applicant's invention was made to modify the thermometer of Yamaka as modified by Canfield et al. above to include a plurality of circumferentially-arranged distal strike faces as claimed, in order to apply a circumferential pushing force on the distal strike face to eject the probe cover.

5. **Claims 2-3** are rejected under 35 U.S.C. 103(a) as obvious over Yamaka ('973) in view of Canfield et al. ('959) further in view of Makita et al. (US 5,340,215).

Yamaka as modified by Canfield et al. teach a tympanic thermometer, as described above, that fails to explicitly teach a groove and a protuberance.

However, **Makita et al.** disclose a tympanic thermometer including a probe 9 having an outer surface of the probe that defines a groove, transversely oriented relative to the longitudinal axis, which is configured to receive a portion of the probe cover 9 for releasably retaining the probe cover 9 with the probe; (see figs. 1-6).

In regards to **claim 2**, since Yamaka teaches a protuberance/annular groove mechanism for fixing the probe cover 10 with the probe 6 without fail (see figs. 2-3; see col. 5, lines 46-57), it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to modify the thermometer of Yamaka as modified by Canfield et al. above to include a groove on the probe and protuberance on the probe cover as taught by Makita et al. in order to fix the probe cover with the probe without fail.

In regards to **claim 3**, since Yamaka teaches a tympanic thermometer comprising a plurality of engaging mechanisms (i.e. protuberance/annular groove mechanisms) (see col. 6, lines 20-26) for fixing the probe cover 10 with the probe 6

Art Unit: 3735

without fail (see figs. 2-3; see col. 5, lines 46-57), it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to modify the thermometer of Yamaka as modified by Canfield et al. and Makita et al. above to include a plurality of grooves on the probe and protuberances on the probe cover as claimed in order to more securely fix the probe cover with the probe without fail.

### ***Response to Arguments***

6. Applicant's arguments filed February 21, 2008 have been fully considered but they are moot in view of the new grounds of rejection.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



Art Unit: 3735

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RENE TOWA whose telephone number is (571)272-8758. The examiner can normally be reached on M-F, 8:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles A. Marmor, II/  
Supervisory Patent Examiner  
Art Unit 3735

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Examiner, Art Unit 3736